

Remarks

The Office Action mailed May 27, 2004 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 1-20 are now pending in this application, of which claims 1, 8 and 13 have been amended. It is respectfully submitted that the pending claims define allowable subject matter.

The rejection of Claims 1-10, 12-16, and 18-20 under 35 U.S.C. § 102(b) as being anticipated by Guterrez (U.S. Patent No. 6,585,540) is respectfully traversed.

Guterrez et al. describe a multi-connector electronic assembly including a housing (202) having plug recesses (212) therein. The housing element includes a plurality of cavities (234) which receive component packages (232), (234). A shield substrate (260) is disposed on a bottom face of the housing and includes metallic shielding material (266) to shield the bottom of the connector assembly against electronic noise transmission. An external noise shield (272) may also be provided, and the shield (272) may be coupled to the shielding material (266) and ultimately to ground.

As described by Guterrez et al., the component packages (230), (232) are used to condition an electrical signal transmitted via the associated connector, and Guterrez et al. define "condition" to include "signal voltage transformation, filtering, current limiting, sampling, processing, and time delay." See Guterrez col. 13, lines 42-58. Of these, only the filtering condition is pertinent to the present invention which is directed to avoiding undesirable EMI/RFI. Applicant notes, however, that nowhere does Guterrez et al. state that filtering is performed to address EMI/RFI issues. Guterrez et al. only discusses such issues with respect the shields (266) and (272).

Notably, the Guterrez et al. device is not unlike the modular jack described in paragraph 4 of the present application. That is, the Guterrez et al. device, at least in some embodiments, includes a jack having magnetic components within the jack and internal to a conductive shell surrounding the jack for filtering signal lines within the jack. As explained

in paragraph 5 of the present application, this arrangement is believed to be problematic and may actually increase the susceptibility of the jack to EMI/RFI.

Amended claim 1 now recites a modular receptacle jack comprising a housing comprising a jack interface and an exterior surface, “a shield extending over at least a portion of said exterior surface, said shield comprising an interior face, an exterior face and signal conductors extending therebetween,” and “a plurality of magnetic components coupled to one of said interior face and said exterior face for suppressing EMI/RFI in incoming and outgoing signals transmitted through the signal conductors.”

Gutierrez et al. nowhere describe that the component packages (230). (232) suppress EMI/RFI in incoming and outgoing signals from the jack. Rather, Gutierrez describe the component packages as providing signal voltage transformation, filtering, current limiting, sampling, processing, and time delay, most of which are incompatible with bi-directional communication. As noted previously, Gutierrez et al. nowhere states, describes or suggests that filtering is performed to address EMI/RFI issues in incoming or outgoing signals. Gutierrez et al. only discusses noise issues only with respect to the shields (266) and (272).

Claim 1 is therefore submitted to be patentable over Gutierrez et al.

Claims 2-7 depend from claim 1, and when the recitations of claims 2-7 are considered in combination with the recitations of claim 1, claims 2-7 are likewise submitted to be patentable over Gutierrez et al.

Amended claim 8 recites a modular receptacle jack, comprising “a housing comprising a jack receptacle and a plurality of signal contacts within said receptacle” and “a shield extending over an outer surface of said housing, said shield comprising a printed circuit board and a plurality of magnetic components coupled to a surface of said printed circuit board for suppressing EMI transmission by said contacts as signals pass from the signal contacts within the housing to an external space and as signals pass from the external space to the signal contacts.”

Guterrez et al., for the reasons set forth above, neither describe nor suggest that the component packages (230), (232) are capable of suppressing EMI transmission as signals pass from the signal contacts within the housing to an external space and as signals pass from the external space to the signal contacts. Rather, Guterrez et al. indicate that the component packages are provided for other purposes. Nowhere does Guterrez et al. describe or suggest that the component packages are provided for EMI shielding purposes, or that the component packages are capable of bi-directional EMI suppression as claim 8 recites.

Claim 8 is therefore submitted to be patentable over Guterrez et al.

Claims 9, 10 and 12 depend from claim 8, and when the recitations of claims 9, 10 and 12 are considered in combination with the recitations of claim 8, claims 9, 10 and 12 are likewise submitted to be patentable over Guterrez et al.

Amended claim 13 recites a modular receptacle jack comprising “a housing comprising a jack receptacle and a plurality of signal contacts within said receptacle” and “a shield extending over an outer surface of said housing, said shield comprising a printed circuit board having at least one aperture therethrough for passage of a signal conductor, and at least one magnetic component coupled to a surface of said printed circuit board adjacent said aperture for suppressing EMI transmission therethrough, thereby providing clean bi-directional communication through said signal contacts while avoiding common impedance coupling of said signal contacts.”

Guterrez et al. neither describes or suggests the modular jack recited in claim 13. Guterrez et al. does not describe that the component packages (230), (232) are provided for EMI shielding purposes, do not describe bi-directional communication through the signal contacts, and do not describe or suggest the avoidance of common impedance coupling of signal contacts.

Claim 13 is therefore submitted to be patentable over Guterrez et al.

Claims 16 and 18-20 depend from claim 13, and when the recitations of claims 16 and 18-20 are considered in combination with the recitations of claim 13, claims 16 and 18-20 are likewise submitted to be patentable over Guitierrez et al.

For the reasons set forth above, Applicants respectfully request that the Section 102 rejection of Claims 1-10, 12-16, and 18-20 be withdrawn.

The rejection of Claims 11 and 17 under 35 U.S.C. § 103 as being unpatentable over Guitierrez et al. in view of Belopolsky et al. (U.S. Patent No. 6,036,547) is respectfully traversed.

Claims 11 and 17 depend from claims 8 and 13, respectively, which are submitted to be patentable over Guitierrez et al. for the reasons set forth above.

It is respectfully submitted that Belopolsky et al. does not cure the deficiencies of Guitierrez et al. with respect to the present claims. Belopolsky et al. nowhere discusses EMI/RMI shielding concerns, but rather only addresses crosstalk issues between the signal contacts. Thus, it is respectfully submitted that Belopolsky et al. adds nothing to the teaching of Guitierrez et al. with respect to the instant claims.

Claims 8 and 13 are therefore submitted to be patentable over Guitierrez et al. in view of Belopolsky et al., and when the recitations of claims 11 and 17 are considered in combination with the recitations of claims 8 and 13, claims 11 and 17 are likewise submitted to be patentable over Guitierrez et al. in view of Belopolsky et al.

For the reasons set forth above, Applicants respectfully request that the Section 103 rejection of Claims 11 and 17 be withdrawn.

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In view of the foregoing amendments and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Bruce T. Atkins", written over a horizontal line.

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